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Phases of Poultry: Common Diseases

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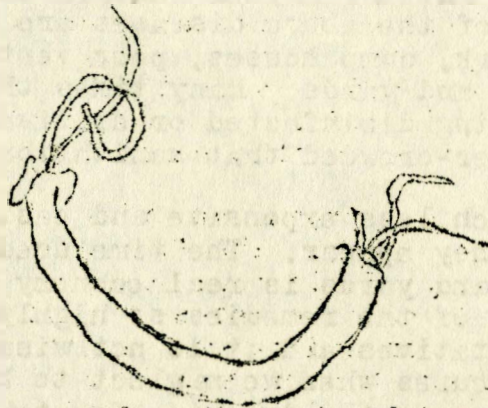
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PHASES OF POULTRY
(Common Diseases)

by
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A section of intestine with long round worms.

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COTTON DISEASES

If the poultry lost through preventable diseases could be sold in a healthy condition the cash value would build a modern poultry house on each farm in South Dakota. This included baby chicks.

The following diseases may to a large extent be prevented.

- | | |
|-----------------|---------------------|
| 1. Roup | 7. Limber Neck |
| 2. Gapes | 8. Crop Bound |
| 3. Tuberculosis | 9. Intestinal Worms |
| 4. Fowl Cholera | 10. Bumble Foot |
| 5. Vent Gleet | 11. Feather Pulling |
| 6. Black Head | 12. Broken Ova |

There is a separate circular on Lice and Mites and one on Diseases of Young Chicks. Either may be had for the asking.

Practically all of the above diseases are due to unsanitary conditions such as dark, damp houses, poor ventilation, droughts, and uncleaned houses and yards. Many times they have been left for years without being disinfected or cultivated. Sometimes the houses are so over-crowded that sanitation cannot exist.

Prevention is much less expensive and easier than trying to cure diseases after they appear. The time used in disinfecting and cleaning houses and yards is real economy of both time and money. The greater part of the remedies so highly advertised are not CURES but preventatives and it is not wise to spend money for these so-called cures when we neglect to keep the houses and yards clean. In many cases the drinking fountain is the greatest spreader of disease. Many times the disease can be kept from spreading through the whole flock by using an antiseptic in the drinking water to kill the germs left there by the sick birds. Use as much potassium permanganate as will lay on a dime to each gallon of drinking water - it will give a deep pinkish red color. When bought by the pound the potassium permanganate is not an expensive remedy.

The house should be disinfected with a 5% solution of crude carbolic acid or some good stock dip or any of the coal tar products. Unless a bird is very valuable it should be killed and burned when sick. If it is to be doctored put it where no other birds can get near it and keep it there until cured or until the case is found to be hopeless.

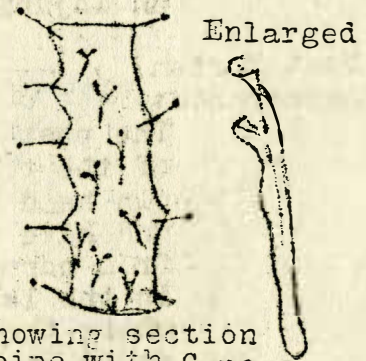
1. ROUP: Roup is a highly contagious and one of the most common diseases which spreads rapidly through a flock of chicks and grown birds. Chicks hatched late are very apt to contract disease when first put into a crowded house.

Symptoms:

1. Air bubbles in corners of eyes
2. Swollen eyes and head
3. Gummy discharge from nostrils
4. Hard matted feathers under wings and on back
5. Loss of appetite
6. Offensive odor to breath
7. In severe cases eyes swollen shut
8. In canker or diphtheretic roup cheesy yellow patches in mouth and throat.

Treatment: When a valuable bird is afflicted with this disease individual treatment may prove successful. Place the affected bird in a clean, dry, well ventilated place; wash the head in warm salt water, massaging and pressing about the eyes and nostrils to loosen the cheesy matter, then dip the head in a 2% solution of potassium permanganate. This treatment should be given twice a day until all trace of disease has disappeared. Eucalyptus oil rubbed on the nostrils and a drop injected through the slit in the roof of the mouth is a good treatment for turkeys or chickens. For the canker or diphtheretic roup sprinkle chlorate of potash with equal parts of hydrogen peroxide and water.

GAPES: Gapes usually affect birds from 10 days to 4 weeks but old birds may be affected. The trouble is caused by small round worms that attach themselves to the inner surface of the windpipe.



Showing section of windpipe with Gape worms attached.

Symptoms: Bird stretches neck, closes eyes, gapes sneezes or makes peculiar sound, shakes head to remove worms. The worm sucks blood from the walls of the windpipe as well as shutting off air supply. Birds become thin and pale.

Treatment: Since the windpipe is so delicate and hard to reach, prevention is far better than treatment. Put unaffected birds on new ground or spade up the old ground. An extractor made from very fine wire or a horse hair doubled into a loop may be used. Open chicks mouth, watch till it breathes, push extractor gently down windpipe - about one inch - twist two or three times, remove, burn worms or dip in boiling water. To one quart of drinking water use 15 grains of salicylic acid. Unless chicks are very valuable it does not pay to doctor them.

TUBERCULOSIS

CAUSE:

Tuberculosis in poultry is caused by a specific variety of tubercle germs. These germs are introduced by a farm by the purchase of diseased poultry or by any way or means that carry bits of droppings from diseased poultry. Tuberculosis in poultry never develops spontaneously. Poor feed and housing or unsanitary quarters lower the fowls resistance to tuberculosis, and make them more likely to contract it should the germs be present. Fowls become infected by tuberculosis by swallowing the germs.

Symptoms: Fowl tuberculosis does not present symptoms with sufficient uniformity of characteristics to justify a positive diagnosis without a post mortem examination. Fowls suffering from tuberculosis usually lose weight gradually until they are mere shadows. The loss of weight is especially noticeable in the muscles surrounding the breast bone. When a living tubercular fowl is examined, these muscles are usually found shrunken to such extent that the breast bone projects almost as prominently as though it were covered with skin and feathers only. When the digestive tract is the seat of the disease there may be chronic diarrhea. Not infrequently tuberculosis causes lameness that may be mistaken for rheumatism, or an injured foot or joint.

Post Mortem

Appearance:

The post mortem evidence of tuberculosis is the presence of the tubercles or nodules which vary in size from a pin head to a pea. They are usually of a yellowish color and have a definite well marked outline, quite distinct from normal tissue. While tubercles are sometimes found in the lungs, they are much oftener found in the liver where they appear as yellow spots. They are also often found in the intestine and other abdominal organs. The inside of the tubercles is pale yellow and often contains an almost solid gritty substance.

Prevention:

There is no cure for tuberculosis. The best means of prevention include the destruction by burning of all ailing or dead fowls and thorough disinfection of the poultry house and all other parts of the premises where poultry was kept. If the disease still persists after this method of prevention has been carried out faithfully for several months the only other course is to sell for food all apparently healthy fowls, and destroy all that show even the first traces of the disease. Then new stock may be purchased and placed in a quarantined area that was not used for the tubercular poultry. After one year the poultry may be allowed the freedom of the farm with little danger of further disease providing the old poultry house was thoroughly disinfected and the lots planted to a cultivated crop.

It is often possible to replace the old stock with home grown stock that is free from disease. If the young chickens are raised in brooders or by hens that are apparently free from disease, the danger of the young stock contracting tuberculosis is much reduced. It may even be necessary to erect temporary quarters to care for the growing stock rather than to risk its presence in the old poultry house and yards.

It is to be understood of course, that while this method is being put into practice, all old poultry yards must be thoroughly cleaned of rubbish and planted to cultivated crops for a season or two. At the same time the poultry house is to be thoroughly overhauled. If the floor is of wood it should be removed and replaced with cement. Ample window space should be provided to admit an abundance of sublight; roosts, nest boxes and all other interior fitting should be removed and burned.

The whole interior should be sprayed with a disinfectant once monthly during all but the coldest months of the year. By practicing either of the methods just outlined there should be little trouble in completely eradicating the disease from the premises while still maintaining a flock of poultry on the farm.

FOWL CHOLERA: This is a highly infectious disease, usually caused by a distinct germ. Unsanitary conditions do not cause it without the presence of this germ, but such conditions make the fowls more liable to contract the disease.

Treatment: Kill and burn all fowls so affected as soon as the disease first appears; thoroughly disinfect all houses and grounds, use 12 tablespoons of stock dip to each gallon of water needed to cover the floor and yard especially in front of the house. There is no cure so prevention is the only thing possible. For the general flock use enough potassium permanganate to give a deep red color to the drinking water and disinfect the house and yard with stock dip, kerosene or any good disinfectant.

VENT GLEET: This disease is carried from one to another by means of the male bird, so when it is discovered it is best to get rid of all males in the flock. Cull the hens carefully, culling several times so that any case not well developed at first may be detected before the young cockerels are active.

Symptoms: The first indication is a light yellowish or grayish scale usually on the sides of the vent. These scales develop into canker sores, which spread rather quickly eating through the membrane of the vent and the skin surrounding it until a raw, bleeding surface is exposed. An exceedingly disagreeable, acrid odor is present in advanced stages. The disease cannot be detected without handling the birds.

Treatment: If the disease is external only, it may be cured by applying a solution made by dissolving a 7.3 grain of bichloride of mercury tablet in one-half pint of water. Apply to affected part with a small brush. Since this solution is POISON great care should be taken when it is used. Apply twice each day. Unless the hen is valuable it does not pay to treat her. In an ordinary flock it is best to sell or use the bird when the first stages appear, before the disease has affected the food value.

BLACK HEAD:

Black Head is a disease of the intestines and liver which may affect chickens but is usually more fatal to turkeys causing great loss. It occurs most frequently when turkeys are raised in the yard or on the range with chickens.

Symptoms:

1. Comb and skin of head and neck often become dark purple or almost black, suggesting the name "Black Head".
2. Usually affects birds 2 weeks or 3 or 4 months old.
3. Bird becomes slow and droopy.
4. Loses appetite
5. Diarrhea almost constant
6. Later, bird becomes dull, weak, tail and wings droop, loose weight, refuse to move.
7. May live a year or more.
8. Blind caeca filled with cheesy contents. Liver enlarged. Yellow or greenish yellow spots in liver.

Treatment:

Little can be done to treat birds as no cure has been found for this disease.

Prevention is practically the only thing that can be done. Free range, under feeding rather than over feeding, breeding stock with good constitution and vitality, fresh ground or well disinfected old ground and houses count more than treatment.

Limber Neck:

This is really not a disease but a condition resulting from sour or moldy grain, or decayed animal flesh.

Symptoms:

1. In limber neck the bird loses control of the neck muscles, allowing the head to twist or bend in any direction.
2. The bird is unable to stand and the head is usually twisted over the back.

Treatment:

Since the condition is caused by spoiled food usually the body of some dead animal or bird, the digestive tract must be cleaned first. Try two teaspoons of castor oil to each bird, or two heaping tablespoonfuls of Epsom Salts to 1 cup of water. Pour two tablespoonfuls of this water down the throat of each bird. Repeat either treatment twice daily.

CROP BOUND:

This is not a disease but a condition caused by the crop becoming overloaded, usually because something has clogged the opening at the lower end.

I have found tar paper, matted grass, twice from the straw stack and some times just grain.

- Symptoms:
1. The crop is greatly enlarged and hard
 2. Bird makes frequent attempts to move the crop from side to side.
 3. Sometimes found in birds with limber neck.

Treatment: Pour a tablespoonful of melted lard or sweet oil down the throat, then gently work the crop with the hand. If this has no effect try holding the bird by the legs, and working the contents of the crop back through the throat. As a last resort lay the bird between your knee, pull the skin to one side, remove enough feathers to allow cutting through the skin and the crop. Remove all contents, wash out with half cup water containing two drops lysol, sew up the crop, let skin slip back to place. Do not feed for two hours, then only a small piece of bread soaked in milk. Feed three times a day if bird seems to be hungry. In three or four days the bird should be able to be turned out with the flock.

INTESTINAL WORMS:

There are three kinds of worms commonly found in poultry - small round, large round and tape worms.

Small: Small round worms are about the thickness and color of No. 50 white thread, and are from $1/5$ to $1/2$ inch long. They are usually found in the caeca, and affect young chicks.

Large: The long round worm is from $1/2$ to 4 inches long and varies in size with the length - a 4 inch worm is about the diameter of a finishing nail, yellow in color. They are found in the large intestine.

TAPE: The tape worm is about $1/20$ of an inch wide and from 2 to 18 inches long, white in color, growing in small divisions or segments like the tape worms found in animals. I have found as high as 27 large round worms and 27 tape worms in the intestine of one hen.

- Symptoms:
1. Birds become pale and thin
 2. Eyes dull, feathers rough
 3. Become weak, stagger when walking
 4. Lose appetite, refuse to eat
 5. Droppings frothy and stringy

Treatment (Same as in Diseases of Young Chicks)

Feather Pulling: Feather pulling is a habit instead of a disease. Usually begins towards spring if birds are closely housed. Birds will eat their own feathers or those of other birds.

- Symptoms:
1. Usually the feathers will be pulled from back and neck.
 2. Depluming mites irritates the skin and sometimes cause the habit to be formed.

Treatment: Place feather pulling birds by themselves if possible. Feed grain in deep litter. Give meat scrap, sour milk or tankage if possible. If bird is valuable fasten cloth over affected parts until feathers have started to grow out. If depluming mites have started the trouble the affected parts should be greased, or in warm weather dip the birds in a solution of Sodium Fluoride to each gallon of water.

BUMBLE FOOT: Bumble foot is a swelling or an abscess on the bottom of the foot caused by a sand bur, cactus thorn or a bruise made by jumping from a high roost on to a hard floor.

Symptoms: Fowl limps or walks with difficulty.

Treatment: If abscess has formed cut a small slit and squeeze out all pus. Wash with lysol water or equal parts of hydrogen peroxide and water. Bandage with cloth and keep in coop for several days.

BROKEN OVA: Sometimes in killing a hen one finds a mass of hard yellow substance that looks like cooked egg yolks. This is not a disease but is caused by an injury. When the ova or egg yolk, reaches a certain stage of development they break loose but instead of going through the oviduct they fall into the abdomen where the high temperature of the hen cooks them. If the hen is in a healthy condition otherwise there is no reason why she should ^{not} be used for food.

- Summary:
1. In raising poultry of any kind keep strong, vigorous stock.
 2. Cull out the old birds. Do not keep them more than two or three years.
 3. Hatch early as spring is the best growing season.
 4. Keep houses and yards clean
 5. Disinfect house often and cultivate yards and runways.
 6. Prevent rather than "doctor"
 7. Use good wholesome feed instead of tonics.
 8. Remember that most diseases are taken in through the mouth and act accordingly.